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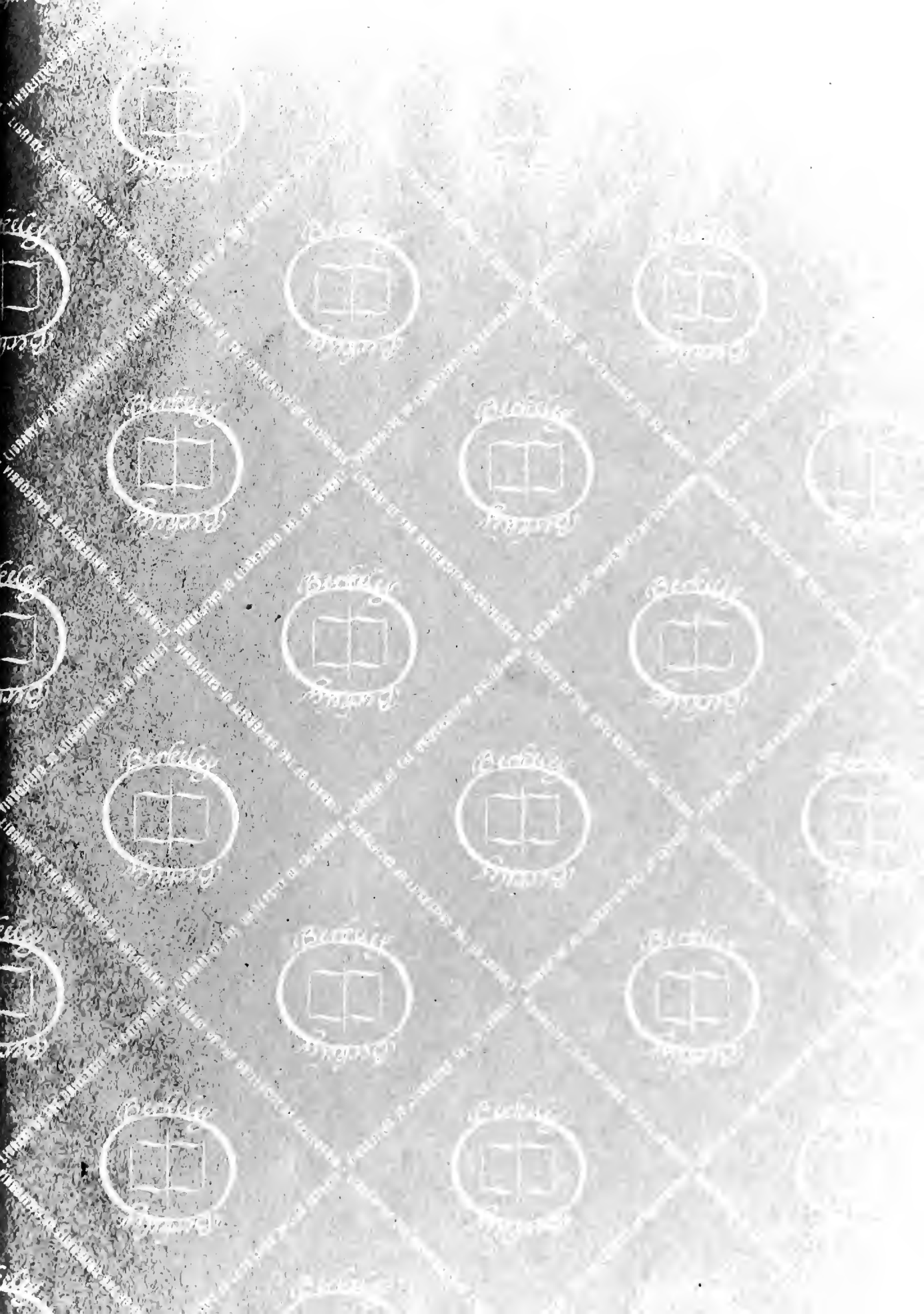
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BALDWIN M. WOODS (*d. Sept. 6, 1956*)

ON UNIVERSITY OF CALIFORNIA EXTENSION



asuc photography

Baldwin Woods, April 1955

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INTRODUCTION

Dr. Baldwin M. Woods was the Director of the University of California Extension during the time of its great expansion in the war and postwar years of 1942-1956. In the following manuscript, transcribed from interviews tape-recorded at his Berkeley home on July 26 and August 1, 1956, he tells how University Extension helps businessmen, doctors, lawyers, and labor leaders keep their education up-to-date; and, incidentally, he describes how one kind of successful administrator deals with his subordinates, his advisors, his superiors, and the public he serves. Both topics are as contemporary as space travel. The American of tomorrow will take lifelong learning for granted. He will also be born into a world whose every sphere (governmental, business, educational, religious) will be run by administrators, committees, and boards of directors. It will be interesting to see whether the words "liberty," "democracy," and "individualism" will have any meaning in that world. Certainly they could, if all administrators were like Baldwin Woods.

Dr. Woods had a long career at the University, beginning in 1908. He was at one time professor of Mechanical

Engineering, chairman of the Department of Mechanical Engineering, and Associate Dean. His memoirs were tape-recorded by the University's Centennial Historian, Walton Bean, and his research assistant, Rena Vassar, during the spring of 1956, and are on file with the University Centennial History collection. It was when Professor Bean left for Pakistan and Miss Vassar for Europe in the summer of 1956 that Dr. Woods called upon the Regional Cultural History Project to help him tell the final chapter of his life.

He died in his sleep on September 7, 1956, before he had time to edit the following transcripts of his interviews. They are therefore presented in their original colloquial and unedited form, not as polished literature but as source material for researchers.

Corinne L. Gilb

Regional Cultural History Project
University of California Library, Berkeley
January 14, 1957

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UNIVERSITY OF CALIFORNIA EXTENSION

(An interview by Corinne L. Gilb with Vice President and Director of Extension Baldwin M. Woods, July 26, 1956, at his home in Berkeley.)

Woods: Extension began interesting me several years ago, and I served on the Extension Advisory Board for some time, about 1938 or '40. Then in 1942 the President asked me to become Director. I had not been in the administration for several years and I was then without an administrative post. And so he and I had quite a conversation about this, and I agreed to write him. I agreed to write him what I believed. And then he would write me a note saying what he thought about it. And we would reach some common ground.

Now I have known the President a long time, since about 1914 or '15, and I've worked with him since 1915 or '16, so that there was no problem of getting acquainted with him, although there are some administrators who do find it a problem, but that is another story. I thought that first of all we should think of the largest group to whom we would render services as a group that contained alumni of this and other institutions. We should not think, however, of Extension as a remedial service to take care of the people who didn't finish high school, because

Woods: the high schools of the state, public school system, now has a service of that type.

Gilb: The junior college system.

Woods: Yes, and they have a public, an adult service, that affects more than a million and a half or two million people a year and is almost free. The State of California has on the whole the most adequate general pattern of adult service that there is in any state. New York State has probably second, and then some other states have some very good services. Pennsylvania State University and the University of Michigan have good services.

So I wrote the President saying that I thought we should plan first to serve our own graduates and the graduates of other universities and colleges. And that we should plan to serve them so that they could keep up. I made the point, as I think I made it last time, that when you are graduated from college, you know, you've been exposed to instruction and courses that cover about half of what you need, and within a few years after you've left, the instruction you've received is out of date, and so are you. So that it doesn't, you can't assume at all that you're educated completely.

Woods: That isn't so. Then I told him I thought we should also seek very strong support from the faculty. We should persuade the departments, convince the departments, that each department had some thing that ought to be done towards our alumni, and that when we got that arranged, we would then seek correlation with the departments. We should be meticulous about following the rules of the Academic Senate for approvals, even though we were mistreated in the process, which would be likely to happen. It hasn't happened as much as I thought it would. We should also be interested in the general culture of people.

So we would have perhaps a three-part program. First, dealing with keeping people up to date in their professions. Second, keeping them up to date in the understanding of the duties of citizenship, which are changing. The emphasis is changing. Their basic phenomena and requirements are of course the same. They're the ones that are usually talked about in the newspaper as though they constituted the whole thing. But they don't. And in the third place we should try to have a pattern of study that would help a man keep up to date in

Woods: adjusting to himself as he grew older and matured, because that was the original aim of the college, to make the man a personal philosopher, study the philosophers so that you got a philosophy of life. And that's one of the reasons why the early colleges nearly always had theology in their curricula, because theology so commonly plays a part. We do not teach theology, at least sectionalism--

Gilb: Sectarian.

Woods: I mean sectarianism, and so we would start more with a philosophy, and those three things put together would be the program for awhile, and it would take you about twenty years' work on each one of them, so it would take the rest of his life.

 The President wrote back and said that (I'm sorry, I haven't the letter here) that those ideas coincided with his own thinking very closely, and he hoped I would go ahead.

 So I did. Beginning in the summer of 1942, I became Director. I caused some disturbances, inevitably. I had tried to cause very few because the people in Extension to be effective must be ambitious and have freedom of action and must have

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- Woods: a sense of freedom about them. The motto of Stanford University is useful, "Die luft die freiheit", "The wind of freedom blows." And of course our own is not bad, "Let there be light."
- Gilb: I wanted to ask you a question--you went in in 1942, during the war years. Were there unusual demands and pressures on Extension at that time?
- Woods: Yes. And they taxed one's ability as administrator because they shouldn't have been. I mean to say there were disagreements about who should have run them which should not have existed. It should not have existed. It should have been resolved through conference and give-and-take.
- Gilb: Disagreements as to who should run what?
- Woods: The instruction in certain fields useful to wartime. For example, the training of men for the shipyards in the upper levels. And so on. And as a result, the President finally decided that Engineering, the College of Engineering, would run all of the courses that dealt with engineering, science, business administration, and were useful for training wartime personnel. It was a challenging subject, and I was on the National Advisory Committee appointed by the President of the United States to run that program, so that to have it assigned to a different agency here made it a little awkward. But I talked with the engineering people. I'd been in engineering

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Woods: so many years. They all looked at me with a certain amount of deference; I was the old timer.

So we started with these courses. They were running them. I kept back and forth from Washington. Had a meeting at least once a month to argue the question at hand, and we set up a small office/^{back there}with about three or four people in it, and worked very well. The main thing was to persuade the manufacturer of wartime material that he needed to do any instructing. He thought that he didn't need anything; or he'd just go out and hire some more engineers. But we had the national figures and we knew that the supply was about gone, that when he went out to hire them, there wouldn't be any. So we said, "What have you done about trying women to do jobs that engineers usually do?" Some of them held up both hands in horror at that and said that of course the women could not succeed, and we thought the girls could do it. Of course that would be a crazy idea of professors. But we had the last word in that, because we trained them for mechanical drawing and airplane design, for example, design of parts, and for certain other things, blueprint reading.

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Gilb: Did you make any effort to recruit students or did they just come?

Woods: We used the company and got students in cooperation with them into a class. We broke a rule that had been in effect for years. We had had a rule over the years that anyone who met the qualifications for admission to a class could take it. In this case you had companies who didn't want the students that were going to work for them mixed up with anybody else. Trade secrets they had, that they wanted to tell them. I knew about that. If he's been a professor of engineering, he knows those things. And so we finally decided, since we seemed to run up against a stone wall on that every time, to make exceptions, if they would supply us a full class. Then we would let the class consist solely of prospective employees. Nobody else could get into it.

Gilb: There was a shortage of teachers generally in this period. How did you get teachers to teach these subjects?

Woods: They went out and got them. It was very interesting. The University did not have ~~so~~ much pressure on its

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Woods: own teachers, and the teaching assistants, and so on, were available. Unfortunately, a good many of them didn't know enough in the applied side; in physics, for example, they would know more about nuclear physics than anybody on the outside, but teaching just nuclear physics wouldn't do the job; you had to teach what happened when you tried to apply it. For example, building the atomic bomb was an engineering project, not a science project, which lots of people never realized. But in the process a lot of physicists learned to be engineers. They caused a good many headaches, but they came along fairly well. And no doubt the engineers caused their headaches too.

This was the way it was done, and pretty soon it was found that the girls could do better drawing and better blueprint reading and better designing than the boys could. This was extremely comforting to some of us, who wanted--the women weren't working at that time as they are now. The increase in the percentage of women who work since 1942 or '3, is really phenomenal. I don't remember what it is right now, but at one time or other I've known.

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Woods: So that was roughly the way the classes were organized.

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Now we insisted that ~~we~~ should have some classes at high level, where, we said, some of your vice presidents would be the teachers. "Mr. Douglass, you detach a few of your vice presidents." He said, "They're working twenty-two hours a day trying to turn out airplanes. We can't have them around teaching." We said, "They will turn out a few more airplanes a day if you'll just let them do a little teaching, because they will teach a good deal and they will learn a great deal from the questions they'll have to answer, and they'll be astonished at how many they can't answer."

Well, this was some more of the problem of the professor. So this inducing of the companies to use their own personnel as teachers, we to approve each one separately. We examined his credentials just as the Budget Committee does. Made it very hard for them. They couldn't understand this process. But the thing went quite well. I would go to a meeting in Washington, would come back and know that they had authorized some new phases and that they had enough money to pay for

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Woods: them. And therefore I would set out--I would go to San Francisco, say, and have a joint meeting of representatives of the leading engineering societies. Since I'm a member of two of them and a fellow of one--I'm a fellow of the American Society of Mechanical Engineers; that's a distinction that is given after awhile. (Sometimes I think it's a matter of sitting around saying "Who would do us the most good if we made him a fellow?" but I try to keep away from the cynicism that that leads to.) I would get them around the table for lunch, and I would say, "I've just been to a meeting in Washington, and this is what they say ought to be done." And they looked at me when they said it and said, 'Out there in California you're taking a lot of contracts for things to build for the war, and you're changing your processes and you're industrializing. And you'd better go to work on this.' So I agreed to come back and ask you if you think it's needed." And then first of all they'd all say in unison, "No, we have no need for it." And then I would have to ask them some searching questions that would bring out the need. And I'd spent time on that.

1. The first part of the paper is devoted to the study of the properties of the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt$. It is shown that $f(x)$ is a constant function, and its value is determined by the initial condition $f(0) = 1$.

2. In the second part, we consider the function $g(x)$ defined by the equation $g(x) = \int_0^x g(t) dt$. It is shown that $g(x)$ is a constant function, and its value is determined by the initial condition $g(0) = 1$.

3. The third part of the paper is devoted to the study of the properties of the function $h(x)$ defined by the equation $h(x) = \int_0^x h(t) dt$. It is shown that $h(x)$ is a constant function, and its value is determined by the initial condition $h(0) = 1$.

4. In the fourth part, we consider the function $k(x)$ defined by the equation $k(x) = \int_0^x k(t) dt$. It is shown that $k(x)$ is a constant function, and its value is determined by the initial condition $k(0) = 1$.

5. The fifth part of the paper is devoted to the study of the properties of the function $l(x)$ defined by the equation $l(x) = \int_0^x l(t) dt$. It is shown that $l(x)$ is a constant function, and its value is determined by the initial condition $l(0) = 1$.

6. In the sixth part, we consider the function $m(x)$ defined by the equation $m(x) = \int_0^x m(t) dt$. It is shown that $m(x)$ is a constant function, and its value is determined by the initial condition $m(0) = 1$.

7. The seventh part of the paper is devoted to the study of the properties of the function $n(x)$ defined by the equation $n(x) = \int_0^x n(t) dt$. It is shown that $n(x)$ is a constant function, and its value is determined by the initial condition $n(0) = 1$.

8. In the eighth part, we consider the function $o(x)$ defined by the equation $o(x) = \int_0^x o(t) dt$. It is shown that $o(x)$ is a constant function, and its value is determined by the initial condition $o(0) = 1$.

9. The ninth part of the paper is devoted to the study of the properties of the function $p(x)$ defined by the equation $p(x) = \int_0^x p(t) dt$. It is shown that $p(x)$ is a constant function, and its value is determined by the initial condition $p(0) = 1$.

10. In the tenth part, we consider the function $q(x)$ defined by the equation $q(x) = \int_0^x q(t) dt$. It is shown that $q(x)$ is a constant function, and its value is determined by the initial condition $q(0) = 1$.

11. The eleventh part of the paper is devoted to the study of the properties of the function $r(x)$ defined by the equation $r(x) = \int_0^x r(t) dt$. It is shown that $r(x)$ is a constant function, and its value is determined by the initial condition $r(0) = 1$.

12. In the twelfth part, we consider the function $s(x)$ defined by the equation $s(x) = \int_0^x s(t) dt$. It is shown that $s(x)$ is a constant function, and its value is determined by the initial condition $s(0) = 1$.

13. The thirteenth part of the paper is devoted to the study of the properties of the function $t(x)$ defined by the equation $t(x) = \int_0^x t(t) dt$. It is shown that $t(x)$ is a constant function, and its value is determined by the initial condition $t(0) = 1$.

14. In the fourteenth part, we consider the function $u(x)$ defined by the equation $u(x) = \int_0^x u(t) dt$. It is shown that $u(x)$ is a constant function, and its value is determined by the initial condition $u(0) = 1$.

15. The fifteenth part of the paper is devoted to the study of the properties of the function $v(x)$ defined by the equation $v(x) = \int_0^x v(t) dt$. It is shown that $v(x)$ is a constant function, and its value is determined by the initial condition $v(0) = 1$.

16. In the sixteenth part, we consider the function $w(x)$ defined by the equation $w(x) = \int_0^x w(t) dt$. It is shown that $w(x)$ is a constant function, and its value is determined by the initial condition $w(0) = 1$.

17. The seventeenth part of the paper is devoted to the study of the properties of the function $x(x)$ defined by the equation $x(x) = \int_0^x x(t) dt$. It is shown that $x(x)$ is a constant function, and its value is determined by the initial condition $x(0) = 1$.

18. In the eighteenth part, we consider the function $y(x)$ defined by the equation $y(x) = \int_0^x y(t) dt$. It is shown that $y(x)$ is a constant function, and its value is determined by the initial condition $y(0) = 1$.

19. The nineteenth part of the paper is devoted to the study of the properties of the function $z(x)$ defined by the equation $z(x) = \int_0^x z(t) dt$. It is shown that $z(x)$ is a constant function, and its value is determined by the initial condition $z(0) = 1$.

20. In the twentieth part, we consider the function $a(x)$ defined by the equation $a(x) = \int_0^x a(t) dt$. It is shown that $a(x)$ is a constant function, and its value is determined by the initial condition $a(0) = 1$.

21. The twenty-first part of the paper is devoted to the study of the properties of the function $b(x)$ defined by the equation $b(x) = \int_0^x b(t) dt$. It is shown that $b(x)$ is a constant function, and its value is determined by the initial condition $b(0) = 1$.

22. In the twenty-second part, we consider the function $c(x)$ defined by the equation $c(x) = \int_0^x c(t) dt$. It is shown that $c(x)$ is a constant function, and its value is determined by the initial condition $c(0) = 1$.

23. The twenty-third part of the paper is devoted to the study of the properties of the function $d(x)$ defined by the equation $d(x) = \int_0^x d(t) dt$. It is shown that $d(x)$ is a constant function, and its value is determined by the initial condition $d(0) = 1$.

24. In the twenty-fourth part, we consider the function $e(x)$ defined by the equation $e(x) = \int_0^x e(t) dt$. It is shown that $e(x)$ is a constant function, and its value is determined by the initial condition $e(0) = 1$.

25. The twenty-fifth part of the paper is devoted to the study of the properties of the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt$. It is shown that $f(x)$ is a constant function, and its value is determined by the initial condition $f(0) = 1$.

- Gilb: The engineering societies thought there was no need?
- Woods: Yes. And the businesses.
- Gilb: Businesses too!
- Woods: That they represented, yes.
- Gilb: That's very short-sighted.
- Woods: You see, these were business executives around the table. They were members of the engineering societies, but they came from business firms.

But we converted them, and then the stress of circumstances began to come fast. We had one man on the problems of adaptation of personnel, to construction, or harmonizing personnel and construction conditions. ^{He} It was amazing. ~~Yan~~ worked from Los Angeles with the aircraft people. You went over to North American Airlines, where Mr. Ken _____, who has since died, was then president. He was working in the third assemblyline. There were two assemblylines for airplanes and he was putting in a third, intending to operate it with women. So our chap went over and took a look at it.

Mr. Kendalberger was always called "Dutch." And he said to him, "Dutch, you say you're going to run this with women. What allowances have you made for the height of women?" Said he hadn't made any.

Woods: "Oh, then," he said, "do you suppose they're all the same height as men? They aren't, and I don't think this will stand up at all; I think you're headed for a fall." Rough language was used.

They went out to see Mr. Kaiser's man at Richmond, about building ships. They were assembling sections, parts, putting them on the ship. They said, "Mr. So-and-so," whoever was running it, Cadmon, we'll say, "Mr. Cadmon, how are you taking the unrelieved stresses out of your wells so you won't have cracking in the wells when you get out to sea." Said, "We just let them do normal processes on that and that will work out anyhow," and the inspector that we had would say, "According to our figures, it won't. Some of your ships are going to break in two." And there'd be a good deal of temperature indications from all persons concerned. But ^{presently} ~~personally~~ they would go to work thinking about it, and they couldn't--an engineer, no matter how mad he is, is trained to force himself to look at the facts.

Gilb: I wondered in what capacity your men were going about looking at--

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Woods: Well, you see, I have mixed the personnel, because the people doing that ~~work~~ were answering to Engineering, but since I was the representative of the University on the National Advisory Board, I came back and talked to Engineering and crossed the lines. I had no authority, but if I told Engineering what they were thinking about in Washington, they might be interested. So I just talked to them about it. That was not strictly speaking in Extension, but it was work that Extension should have been doing.

Well, presently about 1945, we had E-Day in Europe and came along to J-Day later in the fall. Their organization began to be dismantled. The Engineering men from Washington said there'd be no more money for organization of classes after a certain day and so on. And so I said, we'd better get organized.

Woods: I spoke to the Dean of Engineering and said, "Do you want to have--don't you think it would be a good thing if your people sifted through the list of courses you have been given and picked out some that should be given in peacetime?"

He said, "Yes."

I said, "Well, put them on, and if you don't have enough money to pay for them, We'll find the money." You have to cooperate right down to money.

Gilb: Put them on the regular staff of engineering, you mean?

Woods: No, I'd put them on the staff of Extension and find the money.

And so pretty soon we had a list of courses. Now when we'd reached that point, we'd established the College of Engineering at Los Angeles, and Dean Belter had gone down to head it. Belter was one of my students. About 1914 he entered the University and I was his freshman advisor. And he was very loyal to me. So I had many talks with him about it. Pretty soon he went, his thinking caught up with mine and he went right on ahead. He taught a new project that ought to be undertaken for practicing engineers; it would make them much better practicing engineers.

Gilb: The question's been running through my mind--do you think the President selected~~x~~ you as the Director of Extension partly because you were an engineer and at least foresaw this need?

Woods: I rather doubt it. Moreover, he was greatly surprised ~~that~~ at the end of a year or so at what we were doing. Because I had a talk with him. And he wasn't disappointed; he was just surprised. And he was also quite surprised at the growth and volume of business, because for the year '42-'43 our budget was about \$375,000, and our budget for the coming year, '56-'57, is three and a half million. Which means considerable change. And we take in of that about 80% through fees, so the cost to the taxpayer is very low. The cost to the taxpayer is negligible in any case because of the great return to the economy of the state having some highly educated people in industry, blocs of them. And any time we can add some more to the bloc, it's worth it. So that's the way we worked it.

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Woods: Now in Extension I began making the tour of the different schools and colleges. I went to see Education. I said, "We ought to have a representative of the Department of Education to whom we can delegate some authority from Extension to organized classes for schoolteachers, administrators; what do you think about that?" They thought it would be fine. I said, "Can you nominate one?" "Let us think it over," they said. And after a week or two they said, "We haven't been able to find that kind of man yet to do this job." And they thought it over and so on and it went on for about two years. They were looking for a man. And they were perfectly friendly.

In the meantime, the School of Business Administration under Dean Grether--and by the way, Dean Grether is one of the greater men of the University, much more than is recognized, since we use such strong words when we talk about the scientists. Science gets first page. Business Administration is about Page Seven.

Anyhow, Grether came on the scene. You see, about fifteen years ago we had a committee over in

Woods: Business Administration that recognized that we ought to be doing more for graduates of our own and other institutions who work in San Francisco. Businessmen. In industry, in construction, in marketing, and so on. And we should give them a lift at the top. We should take care of the men of promise who are already moving up.

So we sent over word to the President and said that we'd like very much to try a ^{set} ~~text~~ of evening courses in San Francisco. And we had a lot of ^{Director} conversation. We came over and saw ~~xxx~~ Richardson, Leon Richardson, who was then Director of Extension. He's an old friend. Very interesting person. And Richardson said, "Well, the way to do that was just let Extension run it." And he said, "Our people wouldn't accept that. They said, 'We wouldn't just sit on the outside and let Extension run it.' " So we just dropped the whole business. And I've come over to see if we can do a somewhat different arrangement with you."

I said, "It sounds to me like a very important job, and I think we should find an arrangement that is satisfactory to both of us. Would you be willing to have a committee in the Department that would

Woods: pass on the different courses and in addition to have a single secretary of that committee; a formal representative, to whom we would assign the power to act for Extension, to act in our name. The committee was to pay so many dollars to a teacher. (It happens that Extension has the right, by delegation from the Regents and the President, to hire instructors without reference to the Regents. We don't even report them. Last year we used about 3,000 instructors for about 6,000 courses. So you see it's quite an enterprise.) And I said we would name them. And Grether said, "How would it be if you were named Assistant Dean of Business and reported on the academic side to me and then you can make him an Extension officer and he can report to you on the Extension matters?" I said that would be fine and how about recommending that to the President. He said he would. So we wrote a joint recommendation.

The President came back at us. (You learn so much in this business.) The President said, "As a matter of practice in administration, it is generally proved unwise to have a man who reports to two different men." And so I would appoint the man as

Woods: answerable to Extension." Just reversed what I had in mind there. And Extension would be under obligation to consult the Department.

So I said to Grether, "The President won't follow our methods for reasons he considers adequate. This is what their reasons are. Isn't the job important enough to do for us to bury the hatchet? Say I won't do anything of which the academic side doesn't have your approval. I won't do anything, and at the same time, you will nominate the man to me to represent you. You can't make him an Assistant Dean because the President says that isn't right. But whether the President thinks it's all right or not for a man to report to two men, we'll show him it can be done."

He didn't like it very much, but he said, "Okay," and so we started with education. Then I went over to see the medical school. I went in to see Francis Smith, who was then Dean of Medicine and an old friend, and I said, "Francis, a few years ago I was talking to Professor Bryan of the Harvard University School of Public Health, and he said that it was his opinion that if the doctors who were graduates of

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Woods: the Harvard Medical School could graduate with the knowledge, could have now the knowledge that the graduates of this year have, if the practice of medicine by Harvard graduates would move forward twenty years. What are we doing for our graduates?"

He said, "I'm very glad you came in. There's nothing we can do right now. But we've been taking a census of all those who've gone to war. We find they've been doing the wrong things. They've had those who were trained for obstetrics with almost nothing to do because the number of women in the forces was low, and if a woman had a baby, she was almost immediately thrown out of the service or put into a post with no action. You know what would happen, because they would say she would think first of the baby and second of the country. And that's probably true, and I wouldn't blame her a bit. So we find that the obstetricians had been given jobs like first aid and so on, which is way beneath their knowledge, which calls for only a very small fraction of what they already know. And that's bad, that fellow getting back into obstetrics; he's going to have to learn quite a bit. And we've had surgeons out there who have done some modern, have learned

the first of these is the fact that the first of the two series is not a true series.

The second of these is the fact that the first of the two series is not a true series.

The third of these is the fact that the first of the two series is not a true series.

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The fifteenth of these is the fact that the first of the two series is not a true series.

The sixteenth of these is the fact that the first of the two series is not a true series.

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The twentieth of these is the fact that the first of the two series is not a true series.

The twenty-first of these is the fact that the first of the two series is not a true series.

The twenty-second of these is the fact that the first of the two series is not a true series.

The twenty-third of these is the fact that the first of the two series is not a true series.

The twenty-fourth of these is the fact that the first of the two series is not a true series.

Woods: some new operations on the battlefield, and they're going to come back and want to introduce those into practice. Some of them won't fit in the civilian group; some will. We had about 2600 answers," I think he said.

And so I spoke to him. I said, "When you reach the point where you need some help, then I would suggest that you name a member of the medical school faculty to represent you, one that you have confidence in, and we will assign him the necessary power from Extension, and we will talk over things to do, and we will get him going. And when these fellows come back, we'll try to bring them up to present practice."

"Fine," he says, "when it happens, I'll let you know." Well, you know, this is very close to the typical brushoff, so you don't attach much importance to it.

Then I had a call from the secretary of the State Bar Association, the lawyers.

Gilb: I just wrote a book about them.

Woods: And--can't think of his name now; he left that job and went to another. He had--

Gilb: Wild?

Woods: No, that was a higher rank.

But anyhow, this fellow was very good, and he thought we should be doing a job for the lawyers. You know, these things generate their own information circles, and the words going around all the time. You do something for the businessmen and the lawyers do something about it.

Gilb: I think the lawyers' interest in this was also generated by postwar time needs.

Woods: Yes. They found--they made a little summary of what had happened to what a man needed to know in the law during the war. And it runs tremendously high. ~~Then~~ Because every session of Congress, every session of the Legislature, every six months of behavior or operation of a utility commission, public commission, gives rise to a large series of actions which have the force of law, and that's prescribed in their charters when they are named. If you've looked up those things you are acquainted with it, and if not, you can easily find out. Therefore the increase in the number of precedents or decisions is fantastic. I studied up the matter a little bit and went over

Woods: for a session and met with the Committee on Continuing Education of the Bar, as it's called, in this room of the tower of their old building, and I felt the shades of a number of old friends there who had passed on. So I talked with them. I said, "This is what you can do. You can form a committee of deans of approved schools of law. There are already about fifteen in the state; we'll take the deans of those fifteen. They will advise you, your Committee on Continuing Education, what are the desirable things to undertake, and we will present ideas to you from time to time and as they strike us. We would undertake this service. We would charge very moderate fees. It would be self-supporting. We would use surplus from the cities to render the service to small places. And we'd be very happy to administer it for you, under the guidance of your committee, and your committee would lean upon the deans of these law schools for technical advice on curriculum. For convenience in our work, since I have to get approval of your things, it would be more satisfactory if the chairman of the group of deans should come from the University of California, north or south." At that time Dickinson was Dean here.

- Woods: I said, "Would you be starting a night law school?"
And I said it was my thought that none of the courses
would carry college credit at all, not one of them.
- Gilb: The night law school question has been quite a
controversial one for a long time.
- Woods: And I said, we would just stipulate, would write out
a page or two about what we would agree to, would
stipulate that they would not give any credit toward
a law degree.
- Gilb: This was at their insistence?
- Woods: They brought up the question. I proposed this as a
solution. I had the advantage of proposing it. It
seemed very reasonable.
- Gilb: Do you think that Extension might ever form the
nucleus for a night law school?
- Woods: Well, they've been awfully close to it, two or three
times since. This law school at Sacramento, which
is it? not the McGregor but the--there is one up
there, and it isn't, it limps. It is not an
accredited school, and I think there's no chance that
it will be. I know some of my statements here will
be contested by the supporters of it, and they have
a reasonable--they have, I think, a right to their
aspirations to have it become a good law school,

- Woods: but they haven't very much money, not too many students, and not enough books in a library, and they're using the library of the Legislature. I've been into that, and it would cost a great deal of money to do it. So when I told the President what it would cost, in a special report, and said it ought to cost about two million dollars for buildings--that's a sufficient eye-opener to start with--and about seventy thousand for enlarging the library into a real one, and other things--
- Gilb: Your thought was to take over the facilities of this institution in Sacramento.
- Woods: Yes, and operate it and give degrees.
- Gilb: As a phase of University Extension?
- Woods: We never hesitate at something new just because it's been done some other way in the past. That is a bit of past history, interesting but not too significant. It merely indicates that it was probably the best way to do it then; therefore, it should be thought about seriously before you change. But if after you think about it, present conditions call for a change, you make it. Just as we have recently received authority from the Graduate Council to give work, all the work for professional master's degrees in engineering and some other subjects off the campus, and have the degree award.

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Gilb: All the work--when you say that, you sound exclusive--exclusive of whom? any other--

Woods: Of any other on campus. They don't have to do any on campus.

Gilb: I see.

Woods: That's, I may say, quite remarkable. I have been at work on that since 1945. Takes a while.

Woods: Then I came back to Berkeley, and Dean Snodgrass was apprehensive. He is by nature apprehensive.

Gilb: Yes, I know.

Woods: And he attacked me in the press as undermining the whole law system with the night school. And so I had to let that ride awhile. But I was quite surprised, about six months later, to have Dean Smith call me up from the Medical School one morning and say, "You know, we talked about having Extension ~~xxxx~~ do something for the doctors?"

I said, "Oh, yes."

~~xxxxxxx~~

He said, "Well, the time has come. Can you come over and take over?"

And I said, "Well, now, this expression 'take over' intrigues me. This is going to have to be a joint enterprise. Suppose you say you'll let me come over and see you tomorrow, and as fast as we can, we will begin to do something."

So within a week he had appointed a representative of the School of Medicine, blood specialist, arthritis specialist, and we started them off.

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Woods:

There were a lot of headaches. It took a long arm to reach over to San Francisco. And doctors are accustomed to the fact that patients want personal service, and so they cultivate wanting personal service themselves. So you'd give a course with the idea that there would be some representation nationally among the students, and every one of them would want us to arrange in advance for every one of those men his hotel space and reserve it for him, to arrange to meet him at the airport or the train and drive him to the hotel and see that he was registered, and then to register him the next morning without his turning a finger. Doctors are spoiled by nurses.

A nurse~~x~~ is, in most hospitals and in many services still, slightly a slave, and I know about that because I've been working with the nurses, too.

Woods: Well, so then Snodgrass got a new building for Hastings out of the appropriations, and that sweetened his feelings a great deal, and he announced that the building was open for all sorts of uses. So I immediately sent out law man over to see him.

Gilb: I detect the fine hand of a diplomat over here!

Woods: You have to do--a great--you have to think of the way people's minds work, and you just spend your time doing it. Every woman has to think that way about her husband, and every man about his wife, if they want to have a happy marriage. I shed blood over some of those things. Also I carefully left town when Snodgrass attacked me in the papers, so that I couldn't be reached for an answer. Then you see you haven't said anything. If you had said something, it would have been published and he would have answered back. We'd have been in a long-term feud, and might have said things. As it was, we are very friendly now.

We got the law. Snodgrass said it would be all right to have them in the building if we met the conditions of operation ^{of} ~~in~~ the building, of which they were very proud. So we said, "What are the conditions?" We'll try to meet them, but what

Woods: are they?" So he dug out a page of them. Quite exacting and difficult. Some of them almost impossible. But we looked them over, and I said, to our law man--he came back and told me about them-- I said, "Is there anything in the list that we positively can't do?" He said, "Oh no, we can do all the things, but nobody should ever be allowed to step on us like that." I said, "Well, suppose we let them step on me and then we'll just bypass you, and so we'll say 'yes.'" And we did, and got going.

We now have the law program that is very effective. It yields a net return over expenses of about a hundred thousand a year.

Gilb: What do you do with this money?

Woods: Well, there are a lot of places to put it. When we get through with the whole financing, (I should give you a paragraph or two about financing) what comes out is about 80% of the cost of running Extension is paid by the fees we collect, and 20% comes from state support.

Gilb: Then the fees from the lawyers might help pay for education which was provided for some other group.

Woods: Technically, but I have ducked that question a great deal because it requires so long to educate people to the fact that that's reasonable to charge.

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The first of these is the fact that the
 number of cases of smallpox has been
 steadily increasing since the year 1890.
 This is due to the fact that the disease
 is now more common than it was in the
 past. The second fact is that the disease
 is now more fatal than it was in the
 past. This is due to the fact that the
 disease is now more common than it was
 in the past. The third fact is that the
 disease is now more contagious than it
 was in the past. This is due to the fact
 that the disease is now more common than
 it was in the past.

The fourth fact is that the disease is
 now more dangerous than it was in the
 past. This is due to the fact that the
 disease is now more common than it was
 in the past. The fifth fact is that the
 disease is now more difficult to treat than
 it was in the past. This is due to the
 fact that the disease is now more common
 than it was in the past. The sixth fact
 is that the disease is now more likely to
 spread than it was in the past. This is
 due to the fact that the disease is now
 more common than it was in the past.

The seventh fact is that the disease is
 now more likely to cause death than it
 was in the past. This is due to the fact
 that the disease is now more common than
 it was in the past. The eighth fact is
 that the disease is now more likely to
 cause blindness than it was in the past.
 This is due to the fact that the disease
 is now more common than it was in the
 past.

Woods: The doctors wanted every cent of the money that came in for doctors kept in a special fund to be spent only for Medical Extension, and so on, up and down the line. I said, "But if you do that, I can't do the full job of Extension. All I can promise is this, that if you get in trouble and are short of some money, we'll take it away from some of the fellows that have some surpluses and give it to you. But we won't let you make a practice of that." It's difficult. And so I generally ducked the question. I got the doctors sidetracked on it a bit, at least to not thinking it was so important for a while, and got the lawyers to agree that we were after all making the courses useful in the smaller places, and that the money that came in was going for the purpose of getting out syllabuses for the courses. We are now printing them in book form. I'll get one and show you.

Woods: Well, we got the syllabuses going in a series. This is one copy for one course. The people who write the sections of this book are practicing lawyers who are considered experts in the bar in that field, and they contribute ~~to~~ what they write, no charge. Sometimes it takes 120 hours to do one chapter.

Then we send these important lawyers to places all around here. They are giving courses right now in about twenty-six places throughout the state.

Gilb: Are your lawyer-instructors uncompensated also?

Woods: No, they're paid. They're paid a token payment which is roughly \$20 an hour. That would be \$50 an evening, two and a half hours. And travel expenses, which are computed by the formula based upon the University of California faculty formula.

Gilb: Which is a fairly low--

Woods: It's quite low. And they all figure that we are using people whom we figure would get \$250 a day from clients. And they contribute, when they do lecture in let's say Sacramento, Chico, that they are contributing about the size of the fee of the day, after collecting the amounts we pay them, because of course they would not think of traveling up there on any such basis as the travel amount we allow.

Gilb: So you not only are accumulating the \$100,000 but also the intangible contributions of the great qualities--

Woods: Yes. Well, it happens that--we use some of it for them. We re-invest. When we get out a book of this sort, it costs us say, seven hundred, fifteen hundred for a small edition. You know what they cost. They're expensive. We have to have an office staff of five lawyers to get out the book, to proof-read and so on, and they are nearly all young women who graduated in law. They're very keen. One of them is supporting her husband as he goes through the law school to get his degree. Grace _____ do you know here?

Gilb: No.

Woods: Thoroughly charming person. We incur,--when I said net, that was an extravagant statement, because there are considerable expenses that we haven't covered there, so that we are a little short. But at first blush on the books it will look that way. The law people would say, "You've made \$100,000 this year." We say, "We don't make anything because we're in the education business, where you don't declare profits."

Gilb: You plow back everything.

Woods: Everything goes back. And at the end of the year, we come out on this budget of this coming year, three and a half million, I hope, we'll come out about thirty or forty thousand ahead. That would be 1%. It's not a large margin. In fact, you have to aim below that. You have to aim to spend about three or four percent less than your budget in order to come out even, just as you do on your home budget.

Gilb: Because of inflation?

Woods: Oh, because of all the things you don't think of. You see, it's very much like the Community Chest. For three years I was chairman of the finance committee of the Community Chest of Berkeley. Years ago, fifteen or twenty. And we had an agency come in to whom we paid a flat fee to do the job of hullabaloo and the like and help organize the collectors and solicitors, and away we'd go, and they figured up, well, there were only so many who contributed \$100 last year, and there'll be a shrinkage in those this year, and so on, so they came out by figuring in advance that we would not have as much money come in as we had the year before. I was puzzled, but I couldn't think of any answer at the moment, so I went home and reflected and

Woods: said, "It sounds crazy to me, because for several years we've had an increase. How did that happen?" So the next day I went back and had further conferences and said, "I can't quite figure the same way you do on this. I would say that just as last year we had an increase over the preceding year, this year we'll have an increase over last year. And it will come from all the little contributions that were being proposed and given by the people who weren't here last year, or the people who were overlooked, because that's the way it happened."

I'm an engineer, and when I am estimating a job, I put about 20% on at the end for contingencies. I don't know what they are until afterward.

Gilb: You always expect to spend more than you've calculated on in Extension. Do you ever find that you have an income more than you calculated on?

Woods: Once or twice it has happened. One year we had a net income of--it isn't net because we put in six hundred thousand of State money--and of course we've used a lot of free service from departments of the University, which may have cost \$250,000 that nobody thought about--but we came out \$100,000 ahead in each of two years. That was very fine. I immediately spent that on capital improvements.

Woods: Of course, that's where you can always defend it and they can't get it away from you.

Gilb: How much discretion do you have to deal with your budget internally?

Woods: Complete.

Gilb: Complete discretion.

Woods: The director is--well, the moment he commits a fault it forces things before the regents. Then he'll lose some of it. I've had the good fortune to have stayed fourteen years. So when people talk to me about "you should have the problem of meeting a budget" and so on, I say, "Now let us sit right down and compare notes, because I thought I had that problem and I want to see." It turns out that mine is a little worse than most of them, because up to the time the students register in the course and pay their fees, we've had no income. This course, for example, that book cost fifteen hundred dollars. We haven't had a cent of revenue at the time the book is finished and the course is ready to start. And these girls have been working on salaries that seem to go up automatically every year.

Gilb: And you have no real way of predicting how many are going to register in the courses.

Woods: No, I don't know. Extension, we have had the experience of having an increase nearly every year, but this is happening--so much depends on the skill and ability of individuals.

Gilb: I would imagine then that the director of Extension would have to have business ability and business sense far more than the average administrator in an institution like--

Woods: I think he must have a considerable amount of it. Or the regents will want to throw him out after about a year. I've had very good fortune in explaining to the regents, but I've always chosen to report to them casually on the finances and put the emphasis on the services. That was intentional, because they are very much at home with picking a difference in two figures and expenses, and they are not at home in the services, and they need education in what the University is doing. I've been given opportunities from time to time. Once a year I get to say a word, when the budget's presented, and you develop some skill in it, more or less, at least I picked up a little. My reports are liked.

Needless to say, I have a half a dozen charts the size of that screen to stand up in a row and

The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the system (1) has solutions for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solutions are unique and are given by the formulas (2).

In the second part of the paper the problem of the stability of the solutions of the system (1) is considered. It is shown that the solutions of the system (1) are stable with respect to the initial conditions if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solutions are stable with respect to the initial conditions and are given by the formulas (3).

In the third part of the paper the problem of the stability of the solutions of the system (1) is considered. It is shown that the solutions of the system (1) are stable with respect to the initial conditions if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solutions are stable with respect to the initial conditions and are given by the formulas (4).

In the fourth part of the paper the problem of the stability of the solutions of the system (1) is considered. It is shown that the solutions of the system (1) are stable with respect to the initial conditions if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solutions are stable with respect to the initial conditions and are given by the formulas (5).

In the fifth part of the paper the problem of the stability of the solutions of the system (1) is considered. It is shown that the solutions of the system (1) are stable with respect to the initial conditions if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solutions are stable with respect to the initial conditions and are given by the formulas (6).

In the sixth part of the paper the problem of the stability of the solutions of the system (1) is considered. It is shown that the solutions of the system (1) are stable with respect to the initial conditions if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solutions are stable with respect to the initial conditions and are given by the formulas (7).

In the seventh part of the paper the problem of the stability of the solutions of the system (1) is considered. It is shown that the solutions of the system (1) are stable with respect to the initial conditions if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solutions are stable with respect to the initial conditions and are given by the formulas (8).

In the eighth part of the paper the problem of the stability of the solutions of the system (1) is considered. It is shown that the solutions of the system (1) are stable with respect to the initial conditions if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solutions are stable with respect to the initial conditions and are given by the formulas (9).

In the ninth part of the paper the problem of the stability of the solutions of the system (1) is considered. It is shown that the solutions of the system (1) are stable with respect to the initial conditions if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solutions are stable with respect to the initial conditions and are given by the formulas (10).

In the tenth part of the paper the problem of the stability of the solutions of the system (1) is considered. It is shown that the solutions of the system (1) are stable with respect to the initial conditions if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solutions are stable with respect to the initial conditions and are given by the formulas (11).

- Woods: talk from, and then I have about twice that many sheets of mimeographed paper with statistics all over them showing what the budget has been and is and how we came out, and so on, what we did with what we had.
- Gilb: What proportion in your budget is supplied by the University and what proportion is self-supporting?
- Woods: From the University about 20%, 18 or 20%, comes to us, and the self-supporting fees provide about 80 or 82%.
- Gilb: Is there any foreseeable change in those ratios?
- Woods: Well, there's a constant fight by the Department of Finance ~~and~~ the State of California to reduce the support from the State.
- Gilb: Especially as your increase in fees comes. In other words, you're apt to be penalized by your own success.
- Woods: Oh yes. And the regents are often saying, "Why isn't Extension completely self-supporting?"
- Gilb: What you then have to do is to argue that the increase in need is even greater in proportion.
- Woods: Well, you have another problem which is far more serious. I have, I believe greatly in the old-fashioned type of practical philosophy that so many

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Woods: of the old-timers had. They were exemplified considerably in Will Rogers. So I say this, whenever a proposal is made for an undertaking by Extension that we have not been doing, our rule is that we first spend our time in studying it to see if it's something we should be doing educationally, and then we find out whether we could finance it. Never the other way around, because if you just started worrying about the money, then you may be cheated out of one of your great opportunities to render service.

Gilb: Sounds fine to me.

Woods: And you have to watch your aides. You see, I have a business officer in the north and one in the south who are on the vice president of business affairs's staff. And the vice president of business affairs and I are long-term friends. He said, "You ought to think about getting everything in order so that when someone comes that won't listen to the business officers as you have been listening, then, he will know enough to change his mind and go with them anyhow." He visualizes too much happening, or I do; it's hard to know. I felt that on the whole, I've taught the business office far more than they've taught me financially.

Gilb: You've left them the illusion that they've been teaching you--you've managed to do two things.

Woods: I call upon them for a great many services. And certain things about the budget, for example, they'll always take care of. They prepare their preliminary draft and their request for the budget for me, which I will sign ultimately and send to the President. But I frequently make changes. Then I send them a copy just the same when I send it, and I talk it over with them two or three times. I don't believe in blindness in an office. I need all the knowledge of every person in the office and all the enthusiasm and initiative he has, and fight to keep it.

You are also affected from year to year by the personal characteristics of people. I'm retiring. I am technically retired as of now. When I go out, certain things that I do well may not be done so well. Certain things that I don't do too well may be done better, and that will be a matter of personal qualifications. A new director may be a better man in certain matters. I hope he will be.

Right now the head of the class department in the south, the department that produces the largest

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Woods: single revenue of any department in Extension every year, has asked to be allowed to retire by September first. Now. (July 26) And I've had that request about two weeks, and I'm a convalescent cardiac. And if I were not composed, I should be worried about it. I am somewhat worried. She has been phenominally successful. She really drives those people. Why the faculty let her get away with it, I really don't know. I wouldn't dare do what she does in the way of initiative in attacking things, and I would not expect to have it approved. The Senate has said no to me a good many times, and I've usually considered them wrong, bgt the "no" sticks, you see; they have the authority. The President has said no, the regents have said no. But I have to work now on the question of getting a successor by September first. She has served us faithfully since about 1923.

Gilb: Why is she leaving?

Woods: She's at the salary level and has had enough years on the state retirement system so that she can go out with 80% of her salary. She's single, and she's tired. So it is.

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Woods: Now the head of our law program this past year--

Gilb: That's Stump?

Felix Stump.

Woods: Yes. Has blundered--and I used the word "blundered" as the best one I can think of at the moment--into having his wife divorce him.

Gilb: Oh, dear.

Woods: And he has four small children.

Gilb: He's been praised very highly by the bar. They think a great deal of him.

Woods: He, I consulted with a number of his teachers in law school and so on, and of course he went through, I believe, the Harvard Law School, and then he took the examination for the bar in Massachusetts first. He rated Number One in the examination for the bar. (That I could deliver an address on the subject of.) The lawyers tell me, the law members of our own faculty, that you can rig the course so that your students will almost automatically make high grades in the bar examination, or you can let it go normally.

Gilb: Harvard Law School has the reputation of not aiming at the bar exam.

Woods: And Stump has been very shrewd at this. He came, and I was very much pleased the first week, although I knew that he was being a little rash. He said he didn't think that there's a decent program for

Woods: graduate lawyers in the country, and he thought ours was pretty much behind. Well, we'd already had several committees of the National Bar explain that ours was the best in the country. And so naturally that did not seem to me to indicate seasoned judgment.

Gilb: He's very young anyway, isn't he?

Woods: And he's a little hard to get along with. I think that--I think his wife is a fine-grained, sensitive woman, and that he just made her feel uncomfortable. This is my guess, although I cannot--

Gilb: Is this going to affect his work for the Extension?

Woods: No. Except that it makes it highly desirable that he should get a raise this year. If you're going to have to run two households.

Gilb: Besides that, I imagine that sooner or later a man of that caliber would be getting offers from outside.

Woods: Oh, he'll get offers from the profession, fifteen thousand, most anytime. We pay a little over nine. But we made a little proposal for a raise and it didn't go through. Now I come back from the hospital and sit at home here and ~~xxxx~~ breathe deeply of the restoring air of the Bay Region, and the President has to get ready for a heavy meeting of the Regents,

Woods: and get the PCC straightened out a little bit, so it will stick for at least a month, and then he's going on vacation. I suppose he's up at Echo Lake in his cabin. But I wouldn't ask. I can find out, but I always consider that the kind of curiosity that a man ought to be shot for. And so I can't see him. And I'll--on these higher appointments, like heads of the law program and the correspondence and the like, he personally undertakes to adjust them. Mr. Kaiser has no relationship to them. So I have to wait until close to the twenty-fifth of August to see him. And the regents have announced as policy that they are not going to go back and adjust men's salaries upwards. They've done that enough. So there are perplexities here.

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1. The first part of the paper is devoted to the study of the

properties of the function $f(x)$ defined by the equation

$$f(x) = \int_0^x \frac{1}{1+t^2} dt.$$

It is shown that the function $f(x)$ is continuous and

differentiable on the interval $(-\infty, \infty)$.

2. In the second part of the paper the function

$f(x)$ is studied in more detail. It is shown that

the function $f(x)$ is bounded on the interval $(-\infty, \infty)$.

3. In the third part of the paper the function

$f(x)$ is studied in more detail. It is shown that

the function $f(x)$ is continuous on the interval $(-\infty, \infty)$.

4. In the fourth part of the paper the function

$f(x)$ is studied in more detail. It is shown that

the function $f(x)$ is differentiable on the interval $(-\infty, \infty)$.

5. In the fifth part of the paper the function

Gilb: Do you have trouble generally in recruiting men of sufficient caliber?

Woods: Oh yes. The competition is great. There are four or five Extension services in the country that are ambitious and that are headed by x man who are thinking in large terms. And they constitute a tremendous rivalry.

Gilb: In other words, your rivals are the other Extension services rather than the regular University faculty.

Woods: Yes. Most people from the University faculty we cannot use as administrators.

Gilb: Why not?

Woods: They fail. They don't know enough. This is a specialized thing.

Gilb: How--what is it--the background of the average good administrator?

Woods: Up to the present it has been some administrative ability shown in the University somewhere, with the comprehension ~~xx~~ of the ideals of the University, because we are in sympathy with them and are working for them. Otherwise they'll not take so much pains to be in accord with the Departments. It takes lots of time and effort. But we are in accord and we are working that way. Now recently several Universities have placed graduate students from their schools of

Woods: Education in adult education. We're planning to go into the field with certain Extension services to get practical experience. And I do that. I let Paul Sheats in Los Angeles--he's an associate director--take somebody from somewhere else every year.

Gilb: As an intern.

Woods: As an intern. Barrows up here is more of a self-worker, and he can't use one very well.

Gilb: You mean he doesn't like to delegate.

Woods: Well, he does pretty well on delegation, but he wants to think things out himself, and you have, he has to get to a certain point before he wants to delegate, and there are only a couple of people he feels like delegating to.

Now I try to delegate everything that it is possible to delegate. The limitations come from above, to me. I get a letter from the President saying, "You personally are authorized to act for me in doing so-and-so. This is not transferable."

Gilb: Even if you delegated everything you could, you'd still have a great deal.

Woods: I delegate a great deal. For instance, Sheats at Los Angeles is running a program as big as, well, maybe a little larger than the program at Berkeley, and I rarely know the details of anything. But I see him--I've been going down about twice a month and spending three or four days and talking over matters with him, and we tried to pick out the things that have some general significance for us, to see how it works.

I do the same with Barrows here.

Gilb: I did want to get an answer to the question of where do you recruit your administrators.

Woods: It is best to recruit them from other Extension divisions. Just as the University of California looks around to Princeton, Harvard and Columbia, and looks for some men, so we look around. We say, "University of Kansas is not such a great Extension service, but they've certainly got a man in this field. He makes a stir at every meeting of the Directors, and we'd like to have him out here, so why shouldn't we offer him \$500 more than he's getting, or a thousand, and cost of removal, and bring him out."

Gilb: And you have the means to compete in that underhanded fashion? (laughter)

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Woods: Just the same way the President does. Andx so I would--but the same thing is reciprocal. I'm considered the head of the staff--the University is considered the head--I keep saying "I" when I shouldn't--and a number of altogether superior people. Stump is perhaps the best in the country in the law.

Gilb: I don't think there's any question about it.

Woods: No. I don't think so. In medicine, I think there's a man in Los Angeles, Sternberg, or a man up here who's a lung specialist. What is his name? In medical extension. He's one of those--give the others a head start. They know what they're doing. They know the pitfalls. You see, very soon you get these specialists in and they know more than you do. But they don't know more than you do, or they shouldn't, about what Extension exists for.

Gilb: Your function is also one of coordination, representing it to the higher--

Woods: I admit that, but we can achieve that in part by having monthly meetings of a little group of top administrators. We have one the coming Monday and Tuesday, which should be interesting. I initiated those and we call it the program committee, in order

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Woods: to avoid the use of the word "executive." I don't like the word "executive" when I'm trying to talk to people about cooperation, because it carries some notion of coercion.

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Gilb: Have you ever had any difficulties with your subordinates, as an administrator?

Woods: Yes, with the man who was acting director when I took over. He became business manager and associate director. I was glad to have him. I didn't want him lost. He knew too much that was valuable; we could get it out of him. And he was very difficult. You couldn't propose anything that was a deviation from past procedure that seemed to him reasonable.

Gilb: That was unfortunate in an era of expanding as rapidly as the one you were going into.

Woods: Yes. Well, he didn't think it should expand so rapidly.

Gilb: Well, with war and--

Woods: He is the one who caused the difficulty in getting these war courses, forced them to go to Engineering. And the fact is--I wanted cooperation. I felt that nobody, anywhere down the line, should order anyone else to do something. He should ask him to. And that should be sufficient. But ordering, not. He didn't have that kind of authority. Didn't exist in Extension. He acted like a Prussian. And he ordered people. And he told people flatly they couldn't do things that I had approved. Instead of

Woods: getting the problem raised to the proper level-- all he needed to do was raise the issue with me and say, "We're going to violate one of the rules they have. We're operating in the business office by this, and hadn't you better authorize me to go and work on Mr. Corley about it?" to which I would have said, "Yes indeed. Can't ^{you} ~~ga~~ get over right away and see about it?"

Well, it took about eight years until he would take that second attitude. Yes, he caused me to age a little. May have given me part of my heart attack; I don't know. But he died of a heart attack himself, instantly. A clot of blood in the aorta. And at the time he died, he had become highly cooperative.

I said the function of the business office is to explain to our people how they can do something that at first blush looks as though it can't be. You're saying something against it.

Gilb: He should be permissive rather than restrictive.

Woods: He should say now, "I'll show you how you can do that." Because I've said every desirable thing in the University can be done; there's a method of doing it.

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Gilb: I went to Harvard Graduate School, and one of my professors there said that. He said, "Whatever is academically desirable is administratively possible and don't ever forget it." And I've never forgotten that statement."

Woods: ^{it's a very important one.} Oh, ~~xxxxx~~ Very important. And before I died, he quoted that as his own. Before he died, I mean. He quoted that as his own discovery. And he took that attitude towards these heads. Like the head of Law would come in and say, "I want to do this." And you see, the reason we had this high autonomy in the management of funds is that the business office is watching what we do. That's one of the chief reasons. And the business office has decided that I am to be trusted reasonably. The President has his opinion, but I'll always tell the truth, which is a basic principle with me. (I think sometimes that I haven't done so well with my youngsters, with my children. I have three sons, and teaching them all to tell the truth, especially when it hurts--) and then I have tried to obey the rules conscientiously, not just to fill the letter of them ~~and~~ but the spirit. And that is very difficult.

Gilb: A large number of those rules refer to your relationship to the Academic Senate.

Woods: Yes, well, the rules, the references to Extension in the Academic Senate, the manual, the formal references, are not very numerous. There are not more than fifteen, I think. But the implied references are very great. And I always accept the implied ones, which are much tougher. And I say, "It is obviously the intent of the Senate, when I read the section, that this shall be applied more broadly than appears. And so we are not here to ask the narrow interpretation but the broad one."

One of the difficulties is that a number of departments try to write our administrative rules for us. The Department of English thinks we have no right to invite any of their professors to lecture in Extension. Have half a dozen departments that feelk that way. Chemistry and Physics ^{have felt} ~~feel~~ that way, until recently.

Gilb: Why? I don't understand.

Woods: It diverts them from things that the Department wants them to do.

Gilb: Oh, I see.

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Woods: And they don't recognize this as an important part of the University work. Not significant. Anything that interferes with a man's research nowadays is likely to run into that sort of thing.

Well, now I think that that is about enough.

(end of interview)

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Woods: The manner of teaching personnel for Extension is ~~isn't~~ quite difficult. You may decide to have a special teaching personnel appointed full time for the job. At least one university does that. But I've always felt that it would be a mistake. And chiefly because the group would have the reputation, if it were not a fact, of being inferior to the regular faculty.

Gilb: Right.

Woods: And that would ruin much of the effectiveness. So I have said no. Therefore we have tried to get collaboration from the departments in lending their members to teach, and we have paid them a small amount. The pay is not very much. It runs from \$6 to \$15 per teaching hour, for a contact hour with the class, and the teacher must in addition must prepare, which frequently means completely revising his material, because the material ready for undergraduates is not suitable for adults. Their minds work differently and they have a different background. They've lived more lives, and living lives changes you a great deal. I'm nearly sixty-nine; I've lived a long time. What I thought and believed has been

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Woods: challenged, sometimes for the worst, sometimes for the better. As to the classics, it is for the better.

Gilb: I want to ask you about ^{your recruiting} ~~the motivation~~ of teachers. What is the motivation of those people you manage to get off the regular faculty?

Woods: You have to--I speak now in terms of social psychology, about which I don't know a thing.

Gilb: So that qualified you to talk! (laughter)

Woods: And most people who talk about it have that qualification. So I have been very close to Milton Chernin since he came here. He thinks I'm a superior administrator, and he says so from time to time.

It is this, in the University we can never pay, or at least there's no prospect of our paying, salaries commensurate with those in industry. In engineering, for years I had the experience that when a man reached the point where his ~~his~~ outside offers were double what we could pay him, he would leave us, and I was always preparing for that. And I always give him my blessing when he left, and said we would count him forever a member of our department, even though he left us.

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Woods: Because of the economic situation with which people are confronted normally, and the cost of living, the inflationary spiral process, professors frequently are behind in money, and they ought to have a way to earn some, and the best way, it seems to me, is to earn it in the thing in which they are most competent, which is teaching, or sometimes research. During the war the University made some exceptional rules, particularly Regulation No. 4, limiting the amount the professor might be paid in addition to his ~~fx~~ salary for doing research. Before that time it was considered very bad manners to accept any money for doing research, especially in physics and chemistry. In English they have not yet changed their minds. And so it is generally figured somewhat in this fashion: a professor of English, a member~~of~~ of the faculty of the department, will say, may be told by his chief, ^{has been in the last few years} "Now I think I can get you a promotion of \$500 a year beginning next year if you will get out a substantial publication this year. It need not be large, but it must be of good grade and pass muster. And you'll get that the rest of your life. Why teach for a few dollars from Extension, which will last only for ~~x~~ the semester and stops, because

Woods: it's only for the course that you get it? It is against your financial interests to teach for Extension."

Gilb: Is it against their academic interests? I mean, does it lower rather than enhance their prestige?

Woods: On the whole, it did lower very greatly their academic prestige, and that was one of the greatest ^{that faced us} problems/in these years. And so we did--at least I attempted--many things to change that. One of the chief of which was to have the programs of Extension suggested by the heads of the Departments, the deans, or by special committees within the Department appointed for the purpose. And then we gave those programs. We went to the representative assembly with a number of sequences of courses that made sense, fell together, very much like what you have for a master's degree, and we said that we would like to give a University certificate for satisfactory completion of this sequence. And it would be labelled Certificate in Public Health Administration, and we would publish it with the motto of the University, the seal of Extension, and the signatures of the chief officer of the Department and of the vice president of Extension. We have

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properties of the function $f(x)$ defined by the equation

$$f(x) = \int_0^x \frac{1}{1+t^2} dt$$

It is shown that the function $f(x)$ is continuous and

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arbitrary values of x .

3. The third part of the paper is devoted to the study of

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problem of the construction of the function $f(x)$ for

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7. The seventh part of the paper is devoted to the study of

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problem of the construction of the function $f(x)$ for

arbitrary values of x .

Woods: that authority now, for about ten different certificate sequences, each of which would take a student about two years to do, going to school two nights a week. And they consist of some specially designed courses and some upper division courses in the Departments. They are in general harder than is likely to be prescribed on the campus. I know that will be contested, but I'm of that opinion after watching.

Those sequences are very significant. They are taken very seriously. Last spring, before my heart attack, I had one bunch of forty of them to sign at once, the largest I've ever had.

Now to get your teaching staff, you have a rather large problem because at best only about one member of four in the faculty is competent to teach adults.

Gilb: I'd make that even broader, but we don't need to.

Woods: And so I can't use many members of the faculty, because they fail. Now they would deny this in the main. Therefore many things I say are not serious for publication, because they would stir up needless strife, but we've had the experience. So every

Woods: instructor for a course in Extension is appointed, is nominated by the Department ~~and~~ or by us and with Departmental approval--it has the approval of both, and I retain the right to refuse to re-employ.

Gilb: Do you find that the people who are nominated are those in the lower echelons?

Woods: Well, that leads further into this economic spiral. Nearly every assistant professor at some place along the line fails to get promoted--I'm not talking about the geniuses who are recognized nationwide or world-wide--fails to get promoted as rapidly as the needs ^{rise} of his family ~~expire~~, and if he has a considerable family, and the University has certainly not adopted the policy in favor of small families only--then that may be serious. Professor Bolton, I believe, had eight children. So there will be health expenses. (Fortunately the Kaiser Foundation has lent a tremendous aid there. Only those who have dealt with it have any idea. For example, my period of lying in the hospital cost me no extra money whatever, not one dollar.)

Gilb: But you find that this incident of need is coincident with skill? ~~with~~

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Woods: Ah! There you have a very delicate question. Sometimes it isn't. Sometimes it is. Often a man~~x~~ is competent to offer to adults one course, and only one. Use that one. And then the students in Extension, especially the classes that are wholly adults, are quite vocal, and if the teacher is not doing what they consider a first-class job, and demanding of them enough work, then they will report it and they will object and say, "We will not re-enroll under this man; he is not adequate." And that will reach me very fast, just like gossip.

Gilb: And you have the power to act on that.

Woods: What I do is simply not re-employ him. I do not believe in discharging a man in the middle of a course, where he's meeting a class two evenings a week for eight weeks. No, no. It isn't that important.

Gilb: I notice that your faculty is supplemented by people who are not on the regular faculty.

Woods: About three-fourths of the faculty are people from the outside.

Gilb: And you do this out of necessity rather than choice.

Woods: Only in part. We would be glad to have a much larger number~~mf~~^x of regular faculty members, and from

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Woods: certain departments like medicine and law, medicine particularly, and engineering, we can get a higher percentage of faculty members who are competent, because it's a profession. Now the average faculty man doesn't know the difference between a science and a profession, and there is a very great difference. The chief of them is a contact with and responsibility to persons. A professional man has clients whom he must satisfy or lose the job. And that gives him a dependence that is very--on getting the answer satisfactory to both. That does not call for lowering of standards. Generally speaking, you have to raise them. You have to educate the members of the class to respect high things. We don't wish to do cheap things.

This past year, for example, we had some--we offered between 5,000 and 6,000 courses by 3,000 people. That is a very large undertaking.

Gilb: I would like to ask again, what is your policy on recruiting people who are not on your regular faculty?

Woods: Oh yes. The recruiting of people not on the regular faculty follows a pattern. They must be highly competent in their own field. They frequently are

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Woods: the best people to give applied courses. They know much more than the faculty people about applied courses. A man in a few years when we build atomic structures quite generally, the engineers who build the atomic structures will be better lecturers on the design and construction of structures than our engineering faculty. At present the engineering faculty can lecture on both. Chiefly because it's been restricted, under secrecy. It's classified material--you've heard the expression. In other words, unless you're one of a very select number that have been investigated by the FBI and the Atomic Energy Commission staffs, you're not allowed to work there.

Gilb: What about courses that are not applied and not professional? And yet you have people that are not faculty members. Where do you get those from?

Woods: Generally speaking, the department knows some of them. In the field of marketing, for example, which is a large field in business administration now, the faculty members who are specialists in marketing know some of the past students of the University who belong to that field and are a marked success,

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Woods: ^{who}
and ~~xxx~~ have a desire to teach a course. They
don't care to become teachers.

Gilb: These are people who are employed in the workaday
world.

Woods: Yes. They are employed professionally outside.
And we investigate them pretty thoroughly.

Gilb: You do take some also who teach just regular
academic course.

Woods: The variety of offerings of Extension is so great
that without writing a book I can't really cover
them all. For example, we have for some years
given a series of courses for admission students.
It is intended to satisfy the students that have
come from high school who did not get recommendations,
but who contend that the grades that ~~xxx~~ were gotten
by the written process in high school did not
represent their ability, and there's some evidence,
a good deal in the minds of some people, that they
are correct, and so we offer them, then, a series of
courses. Not high school courses, college courses.

Gilb: Roughly comparable to--

Woods: Yes, taken right out of the list of lower division
courses. But they must pass with an average grade
of about one point higher than the freshmen on the

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Woods: campus have to make. And if they succeed, they are admitted by the Board of Admissions.

Gilb: And some of your instructors in those courses are non-faculty.

Woods: Yes. Although in general those are the most popular courses for the faculty members. The faculty members, as I have said, get paid from \$6 to \$15 an hour, contact hour, and if the class is of any considerable size, about 40, that will come out to be more nearly \$15 than \$12 an hour, and when you do the necessary number of hours to build up the course, you come out with a fair amount of money. You teach a three-unit course or half of a course, the "a" part, for say \$500. That is not a high pay, and we have complaints at the present time. There are two departments at Los Angeles who will not recommend any of their faculty to teach for us because we don't pay enough.

Gilb: You put this all on the plane of economic motivation. Do you ever get people who are motivated by an exceptional zeal for adult education?

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 properties.

Woods: We do. Nearly every man who teaches for us learns a great deal from the job, and he becomes an enthusiast. He just becomes that way.

Gilb: You don't start out that way, but you get that way?

Woods: Yes. Frequently he starts out rather prosaically and then he develops enthusiasm. And some of them ultimately become some of our administrators. But it is a conglomerate mixture, because, you see, you have this admission group. This admission group will probably be discontinued in another two years, by request of the Board of Admissions. And that is just a reflection of faculty belief that it isn't good.

Gilb: Do you share that belief?

Woods: No. I've defended them many times, because I think that the job that is done is a worthy job. There are one or two things about it that I don't ^{wholly} like, but by and large it's pretty fair. We changed--I insisted on changing admission requirements for the admissions group to this, and then very careful checking of prospective athletes, because it's a favorite trick method of getting athletes in. You have to keep your eye on the grading. So we make comparative records. This all leads to the money question.

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Gilb: Just before we get to that--this you may wish stricken from the record afterward--but I noticed in one of your communiques that you mentioned that one of the directors of Extension, Mr. Ira W. Howarth--

Woods: Yes.

Gilb: Had come from Chicago's downtown college and had run into some difficulty at the University of California, especially in his relationships with the faculty, and I wondered if you could elaborate on that, since we're on the subject of faculty relationships.

Woods: We have been extremely fortunate these last years in getting faculty understanding. We have three advisory boards, one in the north, one in the south, and one in Santa Barbara, all appointed by the President, and the President consults the Director, who consults many people, in nominating members for them.

Gilb: That's the advisory board.

Woods: And they are made up of members of the faculty.

Gilb: Do you have to take their advice?

Woods: You can't ignore it too many times. Technically I do not have to, and I often plead extenuating

Woods: circumstances and secure some delay. In other words, you're just an administrator; you do the best you can. And every now and then they offer you advice which is none of their business. Now you can't say that.

Gilb: It's very dear to my heart, this whole problem, because I have a faculty committee in relation~~ship~~ to my project, and I've had some--

Woods: I've talked--I take matters with them very seriously and I report to them quite frequently, and I have the associate directors at Berkeley and Los Angeles do the same, and the assistant director at Santa Barbara. On the whole it has worked well.

Gilb: What are the pitfalls that a man might--

Woods: The difficulties that you have are failure to understand. I believe that, well, and insistence on the--oh, what would you call--the stock questions about standards that are not real questions of standards. For instance, you can object because one of them can say, "Why, it's clear that you're not giving courses, these courses are not up to standard. A student on the campus gets a much better course." You can say you doubt it, but he is still perfectly sure. And he will ~~cite~~ cite reasons, and they will be pedantic reasons.

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Gilb: A priori reasons.

Woods: There are arguments--"He doesn't take a hard enough examination," "You don't sift them carefully enough at admission," or you don't do this, that, or the other thing, and "You let people teach them who aren't the top people," and so on. That is a problem. Because frequently they want to throw out a teacher right in the middle of a semester.

But we have had increasing understanding. One of the strongest men, I think I mentioned before, is ~~the~~ Dean Grether; another is the Chancellor.

Gilb: Both of whom have had a great deal of contact with people outside the ordinary academic channel.
If you

Woods: ~~He~~ will take anyone who has had to live both in and out of the University, then he will understand.

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Woods: Now Professor Howeth came here in the days when there was great zeal in developing adult education. And he thought that the pattern was to offer the work of the University off campus without restriction, and so he announced graduate courses right off.

If you touch graduate courses, you happen to touch the faculty at a spot of tremendous sensitivity and pride. The pride of the faculty in the graduate courses we offer is very great. And on the whole, justifiably so. And it should be done very carefully. At the end of fourteen years, I've just received approval to do it from the Academic Senate, and it is the toughest job--

Gilb: You've won your spurs.

Woods: Yes. That was a tremendous thing. And the first five years I didn't bring it up at all. I said I would just make explanations to people which will be somewhat a bit of sophistry as to why we mustn't offer graduate work to outsiders. But they see through you. They are very sharp. And so they said, "We still think you're wrong." I

I'll just say that Howeth went very fast. He went faster than could be assimilated. When the faculty opposed him, he denounced them. And pretty soon he was on his way out.

Gilb: Your position, in other words, is no place for anyone who's autocratic and who doesn't understand

Woods: It's just like the New Testament. You must be the servant of all. And you must believe in the University. You must believe in the University with all your heart.

Well, I had had many years of doing that, and I've stood high with the Academic Senate, because right in the middle of the service of acting as Director, I was made chairman of the Committee on Academic Freedom, in the midst of the oath business. It was probably an undesirable arrangement, and I didn't stay at it any longer than I had to to be honorable. But I went through some punishment. There's some people in connection with the-- I went through more punishment than I would have if I didn't insist in telling a little more of the truth than some people wanted to hear, which was that they, not merely the regents but also the faculty had made mistakes, and I could put my finger on them, list down the line, and they did not like it.

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Gilb: Do you think that this need for faculty rapprochement makes it essential that the next Director of Extension be recruited from faculty background rather than from an administrative one?

Woods: Well, I think the next one should come from a group that ~~was~~ has had professional training in adult education and is also a faculty man, either here or in a state university, where the atmosphere is one of a state university, because he's going to have difficulties with the checks and balances of a state university. Now they are much more severe than in a private one. I've worked as a partner to many/^{members} of the faculty of Stanford at times. It did some work down there on their wind tunnel on forms of aerodynamic objects. (I was interested in airplanes since 1915, and I introduced courses about it beginning in 1916, so that--) And I found that they did not have the checks on them. When a member of the faculty--you'd find it out; you already alluded to some things, I can tell--if your advisory committee said to you, "I don't think you'd better do that yet," then you don't do it. At least you do just a little on the edge to report upon and get a basis for going

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Woods: further. You'd have to handle it with the utmost circumspection.

Gilb: Now to get a man with faculty background from the state university who's also had experience in adult education, aren't you apt to be confined to people from schools of Education?

Woods: No. I have brought ⁱⁿ ~~quality~~ in the last few years for recognizing the fact that the University is never prepared to fill a post when it becomes vacant. I have brought in two men for them to choose from, and I have had them under training for six years. And they stand right here now and are both quite competent. And the President will make his choice after hearing from the advisory committee, and so on.

I bring them very forcibly to his attention. When they came, I told them there was a prospect. No guarantee; I can't make guarantees. I can tell you that the University is very commonly addicted to appointing from within. I've seen it happen many times. And I think I'm the last member of the faculty without special training in Education, adult education, who could be the Director. There's too much technically known about adult education now that I don't know, and that the average man

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Woods: taken from a department won't know. And a man in the faculty that I could recommend, I wouldn't.

Gilb: Then there's liable to be an increasing divorcement of Extension from faculty thinking if this is the case.

Woods: No, because they work with it, is what it amounts to. If the next Director is chosen from one of the officers now in Extension, he will have had training and collaboration with the faculty as a major issue. He may not be quite as close to the faculty because he may not be a faculty man.

For example, one of the men who is a strong possible candidate was for seven years~~x~~ president of a small college in Wisconsin, and it's completely academic. He then went to the American Council in Education and worked on a survey. He is liberal in thought but very careful in relation to faculty. He's had experience in it. He will have to win his recognition in the faculty.

The other one is a professor of Education, trained in Adult Education. That's his specialty.

Gilb: ~~XXXXXXXXXXXXXXXXXXXX~~ I wanted to say this, just because I feel it so strongly. I cannot understand why the training and education of adults should be considered inferior in any sense to the training of young people.

Woods: You speak, you drive in my heart, because I don't either. But I find a great many who do not agree with me, and they're prominent people. There is a feeling on the campus ~~that~~ --this is something that is hard--a feeling that my retirement is going to represent something of a calamity. Of course I would stick to the rules, but you don't know about the next man. I would be honorable with the faculty, but you don't know about the next man. People say this to me. I say, "Let not your hearts be troubled," because we have had this training system. It consisted, for example, in having everybody accept the notion of the certificates, which represent a very close rapprochement with the faculty, and the faculty really lays out the sequence of two years, in conferences which may involve the constituents we are dealing with.

We are, for example, running a two-or-three-year sequence of training starting with a course in psychology of human relations, and it is not an elementary, two-bit book. It is given by--who is the man over in psychology--can't say his name now. (This is the penalty of heart attack; your memory is partially gone for awhile.)

Gilb: Lots of people have that problem without having a heart attack.

Woods: He's done a grand job.

But it is understood that until the representative of the Department of Business says that the curriculum is right, you don't go ahead, and every one of them went through that process. And the men who work with me now have had experience of watching training for public health nurses. Visiting nurses, you know, the has this system of them. And toward the end, during the war~~x~~, toward the end of it and right afterwards, ~~xxxxxx~~ we were under tremendous pressure to give them some help. The dean of our School of Nurshing said she couldn't spare anybody and she wouldn't have anybody who wasn't from our faculty doing it. And I went to lunch with her and had a talk with her about it and about the obligation that we had in all of the fields, but she stood firm. And so we didn't offer it. I said, "This is very sad. We should be dbing it. I agree." The head of the class department was just bounding up and down in her chair trying to get going, and I said, "Until the dean says yes, we can't go." That's the basis of operation.

So they've had that experience. Whether they'll stick to it, I don't know.

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Gilb: In order to finish up here, I want to make an abrupt shift to the subject you wanted to talk about today, which was the finances of the Extension.

Woods: Now the--you have to go to the theory of support of public education, and you have to answer certain questions. For which group of students did we intend to have free public education? Does that go from the cradle to the grave? As is ironically announced by some legislators. Because the public school system in California is operating an adult program. There's some 400-plus centers. They take some two million people a year. They have almost unlimited authority. They have authority to cover an almost unlimited field of subjects.

Now if you applied that theory to Extension, you would say that all Extension courses should be free. And I thought that for several years. I attended meetings where to think anything else was heresy. We have a statewide committee, coordinating committee of on education, and/which I probably was the dominating member after awhile, because I was trying to get collaboration throughout and a division of duties a little. They don't want to divide duties; they want

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In order to obtain a full and complete
 knowledge of the various parts of the
 human body, it is necessary to study
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The study of anatomy is a branch of
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Woods: to keep the responsibility free and easy so that they may do anything they please, and this gives some difficulty.

The state colleges charge a fee that is less than ours. We charge for a standard university course offered on campus, which we offer off-campus, \$9 a unit at present. It may be raised to \$10 a unit before too long.

Gilb: Does the fact that they charge less mean that the instructors are paid less?

Woods: Generally speaking, it did, and that's one of my chief arguments. ~~xxxxxx~~

But it turns out that the state automatically reimburses them for their expenses on an attendance basis. They report the attendance in adult classes this year and get the money for next year, and the money is set on the basis of the year before. By law and the Constitution. It's not just a simple matter.

I had to study the Education Code, and it happened that I knew the people who formulated the original law, Mr. Will Wood and Mrs. Ethel Richardson Allen. They were wonderful people. They had a high concept. They advanced the cause

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Woods: of adult education in California tremendously. I would say that everything considered, California has a better pattern of adult education today than any other state in the union.

Gilb: Has more adults too, doesn't it?

Woods: I'd have to argue the point with New York. Aside from New York, I'd say probably yes. New York has an awful lot of them.

So you then ask yourself for awhile, and then you come to the regents. The regents say, "We don't think that a man with a job should be given a free course. He should pay something. He should pay a fair amount of the cost." You go to the Legislature and they say the same thing. The Director of Finance looks at the prospective budget and he sees your item of state support for Extension. When I came in, it was fifty thousand a year. It is now about six hundred and fifty thousand a year, because it was too small, and President Sproul believed in what I was doing?

Gilb: Has it gone up in ratio to the total budget?

Woods: Yes, but if you check on the changing value of the dollar, I can't be sure. I haven't got out the tables of the change in the value of a dollar.

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Gilb: But I wondered if the percentage of Extension in relation to the total University budget had remained constant even though the change in the dollar value had grown.-

Woods: I think it may have shrunk.

Gilb: The percentage has shrunk! Then you've made no real gain at all!

Woods: To hear them talk, you'd think I'd just robbed the treasury. (laughter) It's a fact.

So I presently observed that the belief ~~the~~ of the Legislature, the belief of the state administration, the belief of the regents, and the belief of considerable numbers of the leading members of our faculty was that adults should pay for their courses. They had jobs; they could afford to. Let them pay.

Not all of those conclusions follow, as I've cited them. Frequently, and I'll give you some of the reasons why I did not change my mind too quickly, most of our instruction is given to young adults between twenty-five and say thirty-two or -three. Now the only income they have, if they are salaried people, is the difference between what they receive and ~~the~~ what they expend on operation. Just like a business. So you don't compute that they've got their salaries to spend; they haven't. They have to pay the expenses of running a house first.

The first of these is the fact that the
 government has been unable to raise the
 necessary funds to meet its obligations.
 This is due to a number of factors, including
 the fact that the government has been unable to
 collect the necessary taxes, and the fact that
 the government has been unable to borrow the
 necessary funds from the international market.
 The second factor is the fact that the
 government has been unable to implement the
 necessary reforms to the economy. This has
 led to a number of problems, including
 inflation, unemployment, and a general
 decline in the standard of living. The third
 factor is the fact that the government has
 been unable to maintain a stable political
 environment. This has led to a number of
 problems, including corruption, and a
 general lack of confidence in the government.
 The fourth factor is the fact that the
 government has been unable to maintain a
 stable social environment. This has led to
 a number of problems, including social
 unrest, and a general lack of confidence
 in the government. The fifth factor is the
 fact that the government has been unable to
 maintain a stable economic environment. This
 has led to a number of problems, including
 inflation, unemployment, and a general
 decline in the standard of living.

Gilb: Demands on young people for expenses are often higher than on ^{older} ~~old~~ people. They're raising families.

Woods: Yes, unless the older people are prominent; then they're called upon for everything. I get perhaps twenty calls a month.

Gilb: Philanthropic things, yes, but I was thinking of the initial problems of buying a home and raising a family.

Woods: Yes, and one of the most expensive problems is furnishing a house.

In general, they are at the child age. Their children are coming. And it's well that they should come, because psychologically it's much harder to adjust to growing children when you're older.

(Our youngest son was born when I was forty-six, and he was a sort of caboose to the train, a surprise. Handsome guy, dark eyes and hair, ^{six feet two} looked upon favorably by young ladies and their mothers. So I know about this.)

And the net amount that you have left is what you have to spend. That net amount is often of the order of \$25 to \$50 a month if you have a good salary of \$400 or \$500 a month. Even if it's joint salaries, I don't care, but you've got that much income. Well, there are a lot of people who don't

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Woods: have that much, and they are the people who most need this. Also, the courses, we can rarely get classes big enough to offer these courses outside of the big places.

Gilb: You know, one of the big pushes for University Extension, as I understand it, came from the organized labor movement. Do you have many people from organized labor? Do you serve that need?

Woods: We attempt to. But that was in England.

Gilb: It was to a certain extent in ~~this~~ California too.

Woods: The Workers Education Association in England gave tremendous support to adult education and it's really worth studying. But they really studied pretty much the classics, because they took the standard courses of Oxford and had a tutor come, one of the dons, every week for three years, on one course, before they finished it. Then they took the finishing examination given the undergraduates of Oxford. And if you take economic theory, for example, they really had been up and down the scale. I don't think any such thing happened in this country. I can't find any trace of it. I'd be much interested in knowing what you know about it.

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Gilb: I interviewed Paul Scharrenberg, who was for a number of years the lobbyist for the A.F. of L., and he said that that was one of the measures which they supported strongly, the University Extension.

Woods: They do. They support our getting about \$600,000.

Gilb: I wondered what you give them in return. Does a sizeable part of--

Woods: Oh, they don't--we'd get that in all probability without their help. The point is, will they then sit down with us and plan a program that's usable to people in labor?

Now I have burned my fingers on this job, because I believe that we should offer a full set of courses for labor, and it should be very carefully selected to meet real needs. They will not accept a course in general economics. You have to give one in labor economics.

Gilb: In other words, they don't have this interest in general education which the English laborers have. They want applied courses.

Woods: They want courses that are flavored their way. Now this makes it very ticklish.

So I went over to San Francisco, and as I often say, I took my hat in my hand and went, but I went and saw the Congressman.

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Gilb: Shelley?

Woods: Jack Shelley. This man uses very strong language. (laughter) And I said, "Your boys are not coming to our places. We take a tally and the best we can find is maybe fifty over the state out of our enrollment of sixty-five thousand. And there are things that ought to be done for you; there's a lot of things that you don't know. I don't know what they are right now. I'm not making any special But there are things.

He said, "I'm pretty sure you're right, but do you realize that every time a labor man goes to attend a course, he leaves his job and gets no pay for the time he's gone."

Gilb: Don't you give evening classes?

Woods: We have evening classes. I immediately cited that with great fervor. He said, "But not in our subjects."

So I put a young man to work with him who was in the Industrial--what do we call it?

Gilb: Institute of Industrial Relations.

Woods: Yes. You see, Clark Kerr handled these directly at first, when he came here. I was one of the first men he met on the campus. I worked intimately with him. He is very fond of me, but he says,

Woods: "I ask your advice but I don't follow it. You will get angry with me sometime." And I said we'd wait for awhile about that. He's a very keen man. I think he has not made the hit with the regents that is desirable. He is a Quaker, you know, and he is accustomed to very cautious thinking. He can wait until the spirit moves him, just as long as any regent and twice longer. And when it moves him, he'll have something to say. If it doesn't move him, he'll have nothing to say. Fascinating. I wish I knew more about the Quakers. Walter Hart, ^{English} former professor of philology and vice president of the University, was brought up a Quaker.

Gilb: I'm going to keep you on the subject here.

Woods: Oh yes, we've got to get it done.

So I presently decided that if people of the state wished to have an inconsistency, to have free adult education for those who came to the public school system and presumably were not far enough along to benefit by University Extension, and to have the University charge for its courses, then I would have to accept that verdict, especially since I found that the President believes that way, with his Scotch ancestry coming out all over him.

Gilb: And you would have to charge for labor courses as well as for other--

Woods: Oh yes. But now, however, I said Extension is very flexible, and when we offered the labor course we attempted to sell it as a package. That is to say, all of the men who meet these qualifications may attend. The charge for all of them is so much. Three hundred dollars, all of them may take the course without further charge.

That pleased Mr. Shelley. He swore at some of those who did not like the idea, and he ordered the business agents of the labor unions of San Francisco to appear every day at lunch for an hour's session, and to put in, to pay two dollars each out of their own. Union treasurer would stand the rest. And our cash takers went overthere not quite prepared for this, and they were deluged with \$1 bills. They had never seen such a quantity of them. They came back with over eight hundred, and they took three or four days to straighten out who had paid and who hadn't. It was quite a--

But the best thing we did in that course was the final session on collective bargaining.

Gilb: How many people came?

Woods: About four hundred. Too many to do a complete job with. But they wanted it that way. And if you're

Woods: going to do a job for these groups, you have to do it the way they want it a time or two. You don't have to do it forever. You see, so many times when you do something by sending appeasement, you get caught in the snags of it and you keep right on doing it that way for a long time, and a bad thing grows up. That isn't the way to administer. That's administration with no brains. You, after a little while, come at them with a little change. So we did. About the third time we said, "Don't you think that in having the discussion of collective bargaining, we should hear from the management side?" And so we got the secretary of the Manufacturer's Association of San Francisco to come and give the lecture preceding the last one, and one of the men in labor economics to take the last one, and then hold your discussion. Oh, they thought that was fine. If it was so-and-so representing the industry. They would hear one man, and he was the only one they would listen to. You see, you're dealing with the free American citizen, ~~and~~ as he is called.

Gilb: I do a number of interviews with both labor and management, so I--

Woods: You know the view. ~~X~~

Gilb: I know the view and I know the people.

Woods: So we did that. That worked very well. Then we got in down south with the steelworkers. I went down and saw the general secretary of the steelworkers of California. He was in Los Angeles and I had a visit with him. We may have had lunch; I've forgotten. And I proposed to him that we have a conference meeting on the problems of the steel industry. We talked about some things, a number of important things. There would be unlimited time for discussion. We'd break up into groups of four or six that would have two-hour sessions by themselves.

Gilb: Just think of the possibilities of this! For the welfare of our whole country.

Woods: It is something that people don't grasp.

We tried to keep our imaginations open always, and my people are only useful as long as they are full of enthusiasm and imagination. They are the only ones I can use.

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Woods: On the financial side, I'll say another word. When I changed to go to the American people, then I went to the President and I said, "Can't we have a policy for the financing of Extension that will indicate what things are to be charged to income and what will come from the state?" He thought he'd appoint a committee. He named a committee. Mr. Corley was chairman. The former comptroller, who died--Langstrom? no, it wasn't that--close to it. Swedish name, very fine chap. The most imaginative we'd had. He was very helpful, because I'd written a book on engineering economics. And he decided I was an authority on economics, and if I proposed a certain method of setting up accounts for Extension, it would be all right. Never mind what I did or what I'd been doing. He just told his own staff, "Professor Woods knows about economics. He has written a book about it. I've read it; it's a good book." This he announced right in the middle of a conference, which upset me completely. I was not prepared for that praise from him. Oh, but the book was not quite what he said.

And so we got going. The committee came back, and here again, I had to do something that I would not generally admit publicly. I had to educate my

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Woods: finance officers to the policy. They were presumably my financial advisors, but actually I devolved a financial policy and instructed them in it over the years, and that comes from being an engineer.

Gilb: That is also consistent with your philosophy of first dealing with what is desirable and then with what is economic.

Woods: Yes. Well, I said that I thought that we ought to pay from public funds the ready-to-serve costs, that is to say the costs that go with having an organization ready to do the job, manned, with Director, Associate Directors, business officers, recorders, all set up to do the job, and with teachers on the lists, and then the students should pay what was added when you taught the course. All right. The committee, after turning medown for about three years, was finally, finally said that that would be fine. So we had the unanimous report to the President. We went in to the Finance Committee. (One thing you will learn the longer you are here, the complexity of this institution. It is very difficult.)

I had to be prepared to support the recommendation after it was made, to the Finance Committee, and two members of the Finance Committee did not think you should ever give ^{to a laboring man.} a course ~~XXXXXXXXXXXXXXXXXXXX~~

Woods: They thought it was best to leave them ignorant. Distinguished regents. If I gave you the names you'd be shocked.

Gilb: I certainly would be. I'm shocked anyway, without the names!

Woods: When that happens right in the middle of a meeting, what do you do? So I explained to them, thought, that what we thought we should have was the sort of central office expense paid and then certain general things, so we'd have the principal officers paid and be ready to go to work, and if we did that, we'd have to increase the amount coming from general funds, the state funds, by about two hundred thousand dollars. We'd been getting about two hundred thousand and four hundred thousand looked like it would do it. Without looking for growth. I never knew how much growth was coming. One doesn't.

And I said that was the policy that had been recommended, and they said, "What was the policy before?" And I said, "Well, there wasn't really any." The President said, "No, the Extension never had a support policy." The chairman of the committee sort of banged his gavel a few times and said, "It's a wonderful thing to get out of the mess of no policy into a policy after all these years. This is distinct progress. We are very happy that Extension

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Woods: has a policy that sounds reasonable." And so they voted. I said they might not be able to make the advance all in one year; it might take a couple of years. But by then it should be done.

By the time the couple of years were up, the amount that was needed was not the total of four hundred thousand, but six hundred thousand. And we are now getting about six hundred and fifty thousand, this year. Our total budget is three and a half million.

Gilb: Do you find that the regents are increasingly sympathetic or not?

Woods: They are, provided I'm not asking for more money. They are not sympathetic to the point of wanting to vote some more money. But they believe in Extension, that it's a good service. They still think the people should pay.

The fees are now paying 82% of the budget, and 18% is from the state. I think that that is too low an amount from the state, because we do not have any funds with which to do new things. You know what I mean. There are some things that are just crying to be done.

Gilb: No margin for experiment.

Woods: No adequate margin. We do small amounts of experimenting all the time. Every course is in effect an

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Woods: experiment because you don't know how it's coming out until it's over. But that is the way it goes.

I would advise my successor to work along the same lines and never get in a hurry. When he's turned down, not to go home despondent but thoughtful, and work on the question for next year. You just simply can't get it. It just doesn't come in big lumps, the support.

The President knows my feelings that it's inadequate. He has been a great supporter of Extension. He believes in the basis philosophy. He thinks that it's extremely important matter. He never expected us in these years of time to accomplish what had been accomplished. I should perhaps give one final example and tell you how it's paid for.

I had heard an address in New York by the president of the Rockefeller Foundation. Some eight years ago, in which he said--he was talking about the role of industry--and he had an audience of about six hundred, an audience of about six hundred industrialists, and I was admitted because I was his friend. He had formerly been--his name was Chulkins? Hawkins, and he had once been the Dean of Business administration here, and then at Columbia.

1. The first of these is the fact that the system is not in equilibrium. The system is in a state of constant flux, with new material being added to the system at a rate that is equal to the rate at which material is being removed. This is a characteristic of a steady-state system, and it is this steady-state condition that allows us to study the system without having to wait for it to reach equilibrium.
2. The second of these is the fact that the system is not homogeneous. The system is composed of many different parts, each of which has its own characteristics. These characteristics are determined by the physical properties of the material, and they are also influenced by the environment in which the material is found. This heterogeneity is a key feature of the system, and it is this heterogeneity that allows us to study the system in detail.
3. The third of these is the fact that the system is not isolated. The system is in contact with its environment, and it is this contact that allows us to study the system. The system is not isolated from its environment, and it is this contact that allows us to study the system in detail.
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10. The tenth of these is the fact that the system is not static. The system is in a state of constant flux, with new material being added to the system at a rate that is equal to the rate at which material is being removed. This is a characteristic of a steady-state system, and it is this steady-state condition that allows us to study the system without having to wait for it to reach equilibrium.

Woods: Quite a fellow. Oh yes, bright. And he was talking to them and said, "There are three problems which remain to be solved before we can consider the capitalist system of America to be a solid system. At the present time it is unstable. And they should be solved by industry itself, by the members of the capitalist system. The first is to take out the roughnesses in the curve of depression and prosperity and to control them, so that we can't have catastrophic depression. The second one is to determine means of maintaining stability in the international currency markets which have been behaving very badly since the war and which have cost us a great deal of money, and the third is to have a good policy of relationship between industry and government. I look to industry to give answers to all three of these and to give good answers--patriotic, solid answers."

Well, I came home with that in mind, and you can see that I thought highly of it or I wouldn't know it now. And so I spoke to my associate director up here and told him about it, and I said, "A lot of this has got to come from the banks, especially Number Two, and do you suppose there's any chance

Woods: of our devising a program that will train prospective bank presidents so that out of those in San Francisco we might get a few that would rank internationally in these solutions?"

Well, he took it up, and he did a grand job. They got a committee of the junior vice presidents or advisory vice presidents--those are the closest to the presidents of banks--together, representing the eleven largest banks in San Francisco, and they said that they would be glad to sit in a conference and work out a program, provided they were allowed to select the people for the course.

Gilb: People who taught it?

Woods: No, who took it.

Gilb: Oh, went to it.

Woods: And the subjects. We said that we would agree, provided the result of the conference seemed to all participants to be sound, not to any one group but to all.

Very well. We sat in conference for about four months, every week. This is hard work. They were writing the curriculum. They discovered how tough it was. At the end they came up with one.

Woods: They saidx that--what didx we say, forty students, and keep them going for three years. And we said yes. And we said we had made a little estimate of the cost, that it would run to about so much. We would prefer that the cost be paid by a single check. That they simply gather the money together and send us a check. They said that was reasonable. How much was the cost? Harris told them what he had figured out, I think something like fourteen thousand a year, and so then we named among them a nominating committee for admission to the course. Forty to enter each year and continue for three years. They must all be men who had capabilities of becoming at least important vice presidents of the banks, the ones that the bankers felt were on their way to be permanently important in the banks. We preferred vice presidents.

Gilb: Were they aware that this was the criterion of selection, the people who were chosen?

Woods: Yes. We told them so. We said, "We don't want anybody else."

Gilb: The people themselves knew, then, that when they attended this course they had been given a seal of approval, in effect.

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Woods: They--when ~~they~~ you got to the, they didn't know so much. But this advisory, the bankers who were working with us, knew, and they went--the presidents of the banks personally backed their sponsors, their supporters.

And so we started out. We are now taking fifty a year.

Gilb: Where did you get your faculty from?

Woods: From the University. And the first was a man who taught the first subject they wanted taught, for a half year. They said a year, and they finally compromised later on a half year, was in human relations. More banks and business firms were wrecked by poor human relations than anything else. We said we could not teach human relations in the straight commercial sense, that to us human relations was something at a somewhat higher level, more complex, and a psychologist would have to define it as he taught it. All we would say was that we would get them the kind of man that they would ultimately approve of after they had heard him.

The instructors were really on the firing line.

Gilb: Yes, I should think so!

Woods: The second year was devoted to advanced in economics in an unstable economy, which is what is existing at the present. Kidner taught that.

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Gilb: I've met him.

Woods: And then we had, finally, the application of economics to modern banking in the last year. Then they received these certificates that the Senate has authorized.

- This is
- Gilb: This is wonderful! ~~It means~~ the end to Ivory Towerism. It means the University is actually affecting the life of the world.
- Woods: Yes, you see, now, the teachers were indoctrinated. We said, "You will have to deal with many minutiae and trivia along the way, but don't forget to give them a good deal of the best you've got. Never mind whether they ask for it or not.
- Gilb: Of course, men like that are apt to look down on academic people, I find.
- Woods: We found that by the third session they didn't want any changes made in the professors. They thought the-- well, of course, Kidner divided the class up and met little groups of three or four until he'd met the whole class and had an hour or two's talk with them. And so it was with some others.
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Woods: Now we are running the same thing for United Airlines. Executives for the future. We just had a request to run it for Western Airlines. We'll do that out of Los Angeles.

Gilb: I wish your law course would have some general philosophical courses besides all these applied things.

Woods: Yes. That is something I wish to teach here. I may not get to it.

Gilb: Well, he's up against the fact that the average lawyer wouldn't be for it.

Woods: The average lawyer is against it because he feels that he already knows all that.

Gilb: Which isn't the case.

Woods: Far from it. Whenever you find anyone who is certain that he knows all about something, he is a candidate for a class. He's a very strong--

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Woods: I had a talk which I gave at a meeting of the alumni in the south in which I explained becoming a member of an advisory board to a study on the elementary schools, and my preconceived notions of just how things were going to be, and I was so sure that they were going to have arithmetic from the first grade or the kindergarten right through until they knew every bit of it, and then we got into it, and there was a study brought in from Iowa that showed that the students that studied arithmetic in the second and third grades knew much more about it than those who studied in the first, second, and third, by comparative classes, that were carried through on the different patterns. I said, "This is most disturbing, because of course one can't be an advisory member without adjusting his beliefs to the facts." Then I went on with other problems I'd had and turned out to be wrong. It's one of the best ways, because it's not so comical for you to be wrong every time. But I just took cases like that, and it was very effective.

Gilb: The reason this interests me that you would be teaching general philosophical things to people who are forces in the world, people whose whole position-- is that this is one of the hopes of raising the dignity of Extension. It takes you out of the class of an applied trade school.

Woods: Grether thinks this is marvelous, and I've sat next to Wendt-- you may cut this off now.

(end of interview)

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